

# **PROGRAM**

**of the**

**62<sup>nd</sup> ANNUAL MEETING**

**of the SOUTHWESTERN BRANCH of the  
ENTOMOLOGICAL SOCIETY OF AMERICA**



**and the ANNUAL MEETING of the**

**SOCIETY OF SOUTHWESTERN ENTOMOLOGISTS**



**24-27 FEBRUARY 2014**

**EL TROPICANO RIVERWALK HOTEL  
SAN ANTONIO, TX**



**ENTOMOLOGY 2014**  
*Grand Challenges Beyond our Horizons*

# Share Your Research and Tap into the Knowledge of 3,000 Entomologists over 4 Days

**PORTLAND, OREGON • NOVEMBER 16-19, 2014**



**P**ortland, Oregon, host for Entomology 2014, offers limitless recreation, fabulous food and drink (including delicious microbrews), and a flourishing culture. Enjoy the arts, explore the distinctive neighborhoods, and enjoy the variety of nightlife. Portland's modern transit system makes getting around easy. Stop in the famous Powell's City of Books, an independent bookstore that fills an entire city block with more than a million new, used, and out-of-print books; and grab a one-of-a-kind donut from the Voodoo Doughnut shop. And plan extra time around the meeting to explore the amazing wine country, Columbia River Gorge, Mount Hood, Oregon coastline, and other unique areas that are all within easy reach of Portland.

- Plan your presentation topics
- Secure your travel funding early
- Prepare to share, learn, connect and have fun!

**Stay tuned to eNews and to ESA's website for program information.**

[www.entsoc.org/entomology2014](http://www.entsoc.org/entomology2014)

**Questions? [meet@entsoc.org](mailto:meet@entsoc.org)**

**Mark these important dates on your calendar:**

Program Symposia Deadline	January 31
Section & Member Symposia Deadline	February 28
Program Symposia Announced	March 3
Section & Member Symposia Announced	April 14
Paper/Poster Submission Deadline	May 30

**Plan early to present your research!**

Tap into the expertise of thousands of scientists and researchers from around the world who share your love of insects, and who can offer new ideas and collaborations for your work. Entomology 2014 offers you valuable opportunities to build important networks, share your research, gain exposure for your work, learn what's new and exciting, and to expand your career!



*Sharing Insect Science Globally • [www.entsoc.org](http://www.entsoc.org)*

# SPONSORS

We thank the following people and organizations for their generous donations in support of Insect Expo and other functions of the SWB-ESA meeting.

## PLATINUM



## GOLD



## SILVER



## PERCIVAL STUDENT AWARD



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# PROGRAM SUMMARY

**MONDAY, 24 FEBRUARY 2014**

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7:00 AM - 3:00 PM	<b>INSECT EXPO</b> Room: Coronado Ballroom
7:00 AM - 5:00 PM	<b>Registration</b> Lobby
10:00 AM - 12:00 PM	<b>Southwestern Branch Executive Committee Meeting</b> Room: Cohiba Boardroom
2:00 PM - 3:00 PM	<b>Society of Southwestern Entomologists Executive Committee Meeting</b> Room: Cohiba Boardroom
2:00 PM - 5:00 PM	<b>Presentation Upload and Preview</b> Room: Partagas
3:00 PM - 4:00 PM	<b>SOCIETY OF SOUTHWESTERN ENTOMOLOGISTS GENERAL MEMBERSHIP MEETING</b> Room: Trinidad
5:00 PM - 7:00 PM	<b>Southwestern Branch Welcome Social</b> Mangos Terrace
5:00 PM - 8:00 PM	<b>Student Poster Set-up</b> Room: Monte Cristo B
8:00 PM - 9:00 PM	<b>Student Affairs Committee Meeting</b> Room: Cohiba Boardroom
9:00 PM - 10:00 PM	<b>Insect Photo Salon Judging</b> Room: Cohiba Boardroom

# PROGRAM SUMMARY

**TUESDAY, 25 FEBRUARY 2014**

---

6:00 AM – 8:00 AM	<b>Breakfast</b> (on your own) Mangos Restaurant
7:00 AM – 5:00 PM	<b>Registration</b> Lobby
7:00 AM – 5:00 PM	<b>Job Opportunities</b> Room: Partagas
7:00 AM – 5:00 PM	<b>Presentation Upload and Preview</b> Room: Partagas
7:00 AM – 4:30 PM	<b>STUDENT POSTER COMPETITION</b> Room: Monte Cristo B
7:30 AM – 5:00 PM	<b>Entomological Foundation Silent Auction</b> Room: Partagas
8:00 AM – 10:00 AM	<b>PLENARY SESSION</b> Room: Romeo & Julieta Ballroom
10:00 AM – 10:20 AM	<b>Break</b> Room: Monte Cristo B
10:20 AM – 12:01 PM	<b>STUDENT ORAL COMPETITION: MASTER'S STUDENTS</b> Room: Trinidad
10:20 AM – 11:25 PM	<b>STUDENT ORAL COMPETITION: BACHELOR'S AND PH.D. STUDENTS</b> Room: Romeo & Julieta Ballroom

# PROGRAM SUMMARY

**TUESDAY, 25 FEBRUARY 2014 (cont.)**

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12:00 PM - 1:00 PM	<b>Southwestern Branch Executive Committee Lunch</b> Room: Cohiba Boardroom
12:00 PM - 1:00 PM	<b>Southwestern Branch Members Box Lunch</b> (provided) Mangos Terrace
1:05 PM - 3:50 PM	<b>SYMPOSIUM I: PSYLLOID VECTORS OF LIBERIBACTER DISEASES: USA-MEXICO TRANS-BORDER ISSUES</b> Room: Romeo & Julieta Ballroom
1:05 PM - 4:30 PM	<b>SYMPOSIUM II: ANTS OF TEXAS</b> Room: Trinidad
2:30 PM - 2:50 PM	<b>Break</b> Room: Monte Cristo B
4:30 PM - 6:00 PM	<b>Student Poster Takedown</b> Room: Monte Cristo B
5:00 PM - 7:00 PM	<b>Linnaean Games (Prelims)</b> Room: Romeo & Julieta Ballroom
6:00 PM - 8:00 PM	<b>Regular Poster Set-up</b> Room: Monte Cristo B
7:00 PM - 10:00 PM	<b>Student Mixer</b> Mangos Terrace



# PROGRAM SUMMARY

**WEDNESDAY, 26 FEBRUARY 2014**

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- 6:00 AM – 8:00 AM      **Breakfast** (on your own)  
Mangos Restaurant
- 7:00 AM – 2:00 PM      **Registration**  
Lobby
- 7:00 AM – 5:00 PM      **Job Opportunities**  
Room: Partagas
- 7:00 AM – 5:00 PM      **Presentation Upload and Preview**  
Room: Partagas
- 7:00 AM – 5:00 PM      **REGULAR POSTER SESSION**  
Room: Monte Cristo B
- 7:30 AM – 5:00 PM      **Entomological Foundation Silent Auction**  
Room: Partagas
- 7:25 AM – 12:00 PM      **SYMPOSIUM III: BIOLOGICAL  
CONTROL OF SALT CEDAR: RANGE  
EXPANSION AND FUTURE  
RESEARCH PRIORITIES IN THE  
SOUTHWESTERN U.S.**  
Room: Romeo & Julieta Ballroom
- 7:35 AM – 12:00 PM      **SYMPOSIUM IV: WHAT IS NEW  
WITH URBAN PESTS IN THE  
SOUTHWEST?**  
Room: Trinidad
- 9:10 AM – 9:40 AM      **Break**  
Room: Monte Cristo B

# PROGRAM SUMMARY

**WEDNESDAY, 26 FEBRUARY 2014 (cont.)**

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- |                    |   |
|--------------------|---|
| 12:00 PM – 1:00 PM | <b>Lunch</b> (on your own)  |
| 1:05 PM – 4:50 PM  | <b>SYMPOSIUM V: EMERGING PESTS<br/>IN THE SOUTHWEST AND IPM<br/>SOLUTIONS</b><br>Room: Romeo & Julieta Ballroom |
| 1:30 PM – 5:00 PM  | <b>REGULAR PAPER SESSION</b><br>Room: Monte Cristo A  |
| 2:50 PM – 3:10 PM  | <b>Break</b><br>Room: Monte Cristo B  |
| 5:00 PM - 7:00 PM  | <b>Linnaean Games (Finals)</b><br>Room: Trinidad  |
| 5:00 PM - 7:30 PM  | <b>Regular Poster Takedown</b><br>Room: Monte Cristo B  |
| 7:30 PM – 10:00 PM | <b>Banquet/Final Business Meeting/Awards</b><br>Room: Romeo & Julieta Ballroom                                  |

# PROGRAM SUMMARY

**THURSDAY, 27 FEBRUARY 2014**

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6:00 AM – 9:00 AM	<b>Breakfast</b> (on your own) Mangos Restaurant
8:00 AM - 10:00 AM	<b>Southwestern Branch Executive Committee Meeting</b> Room: Trinidad

## MEETING INFORMATION

### REGISTRATION:

All persons attending the meetings or participating in the program must register. On-site registration fees for the SWB-ESA meeting are:

	<u>Full meeting</u>
Active ESA member	\$175
Student ESA member	\$90
Non-member	\$225
Spouse/Guest	\$50
Honorary/Emeritus	\$60

The full-meeting fee includes admission to all functions, including the banquet.

### ESA CERTIFICATION BOARD INFORMATION:

Information regarding the Certification Board of ESA is available at the Registration Desk.

### SPONSORS:

We thank our sponsors for their generous support of activities such as the Insect Expo, student mixer, Linnaean Games, and breaks.

### AUDIOVISUAL:

ONLY digital projectors with computers will be provided for oral presentations. Speakers must submit their presentations as Power Point files to the Presentation Preview Room one day before the session during which they will present.

**PROGRAM SCHEDULE AND MODERATORS:** Speakers are limited to the time indicated in the schedule, and moderators have the responsibility and authority to enforce restricting time to that in the schedule. Moderators sign in at the Presentation Preview Room before the session.

**JOB OPPORTUNITY BOARD:**

The Student Affairs Committee of the SWB-ESA has a Job Opportunity Board available during the meetings. Employers should provide copies of available opportunities to post. Potential employees/students should bring multiple copies of resumes to leave during the meeting. Volunteers operating the Board will serve as liaisons to arrange interviews if needed.

**LOST AND FOUND:**

Articles should be turned in or reported to the Registration Desk or hotel main desk.

**MESSAGES:**

A message board is at the Registration Desk.

**STUDENT POSTER COMPETITION:**

All students are to stand next to their posters during designated **BREAK** times on Tuesday, February 25.

**ENTOMOLOGICAL SOCIETY OF AMERICA  
SOUTHWESTERN BRANCH**

**2013-2014 OFFICERS AND COMMITTEES**

**Jesus Esquivel, President**

jesus.esquivel@ars.usda.gov

**Bob Davis, Vice President**

robert.davis@basf.com

**Jerry Michels, Secretary-Treasurer**

gmichels@ag.tamu.edu

**Scott Bundy, Past President**

cbundy@ad.nmsu.edu

**Carlos Bográn, Secretary-Treasurer Elect**

cbogran@ohp.com

**David Ragsdale, ESA Governing Board Representative**

dragsdale@tamu.edu

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Trisha Dubie

Heather Hankins

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Blake Bextine

David Kattes

Jackie Lee

Mark Muegge

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Andrine Shufan

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Kim Schofield (Co-Chair)

Lauren Ward

Natalie Cervantez

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Carlos Blanco

Manuel Campos

Rebecca Creamer

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Sergio Sanchez-Peña

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**NOMINATIONS COMMITTEE**

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Carlos Blanco  
Allen Knutson  
Tom Royer

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Blake Bextine (Co-Chair)

**PUBLIC INFORMATION COMMITTEE**

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Jerry Michels  
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Trisha Dubie  
Heather Hankins  
Sarah McKamie  
Melise Taylor  
Lauren Ward

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POSTER AWARDS COMMITTEE**

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Scott Armstrong

Blake Bextine

Scott Bundy

Stanley Carroll

Jack Dillwith

Jerry Michels

Jane Pierce

Eric Rebek

Justin Talley

**YOUTH SCIENCE COMMITTEE**

Mo Way (Chair)

Wizzie Brown

Molly Keck

Roy Parker

Bonnie Pendleton

Jane Pierce

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**MONDAY, 24 FEBRUARY 2014**

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**TUESDAY, 25 FEBRUARY 2014**

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Mangos Restaurant
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Lobby
- 7:00 AM – 5:00 PM      **Job Opportunities**  
Room: Partagas
- 7:00 AM – 5:00 PM      **Presentation Upload and Preview**  
Room: Partagas
- 7:30 AM – 5:00 PM      **Entomological Foundation Silent Auction**  
Room: Partagas
- 8:00 AM – 10:00 AM      **PLENARY SESSION**  
Room: Romeo & Julieta Ballroom  
(3<sup>rd</sup> Floor)
- 8:00 AM – 8:10 AM      **Call to Order and Welcome**  
Jesus Esquivel, SWB-ESA President
- 8:10 AM – 8:20 AM      **Welcome from the Society of  
Southwestern Entomologists**  
Ed Bynum, SSWE President
- 8:20 AM – 8:40 AM      **ESA Presidential Update**  
Frank Zalom, ESA President
- 8:40 AM – 8:50 AM      **ESA Society Update**  
Chris Stelzig, ESA Member Services  
Manager

# PROGRAM

**TUESDAY, 25 FEBRUARY 2014 (cont.)**

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- 8:50 AM – 9:00 AM      **ESA Governing Board Report**  
David Ragsdale, Branch Representative
- 9:00 AM – 9:10 AM      **Entomological Foundation Update**  
Andrine Shufuran, Board Member
- 9:10 AM – 9:20 AM      **Insect Expo Committee Report**  
Andrine Shufuran, Chair
- 9:20 AM – 9:30 AM      **Board Certified Entomologists Report**  
Molly Keck, Branch Representative
- 9:30 AM – 9:50 AM      **In Memoriam Report**  
Phil Mulder, Jr., Committee Chair
- 9:50 AM – 9:55 AM      **Program Announcements**  
Eric Rebek and Blake Bextine, Co-chairs
- 9:55AM – 10:00 AM      **Local Arrangements Announcements**  
Molly Keck and Kim Schofield, Co-chairs
- 10:00 AM – 10:20 AM      **Break**  
Room: Monte Cristo B
- 10:20 AM – 11:25 AM      **STUDENT ORAL COMPETITION:  
BACHELOR’S AND PH.D. STUDENTS**  
Room: Romeo & Julieta Ballroom  
(3<sup>rd</sup> Floor)
- Moderators: Manuel Campos<sup>1</sup> and Sandipa Gautam<sup>2</sup>, <sup>1</sup>Texas A&M Agrilife  
Research and Extension Center, Weslaco, TX, <sup>2</sup>Oklahoma State  
University, Stillwater, OK
- 10:20 AM      Introductory Remarks

# PROGRAM

## TUESDAY, 25 FEBRUARY 2014 (cont.)

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- 10:25 AM 1-1 Comparison of boll injury, boll rot, and yield loss caused by two species of a boll-feeding sucking bug complex (Hemiptera: Miridae and Pentatomidae) on South Texas cotton. **James P. Glover**, james.glovertamuk@gmail.com<sup>1</sup>, Charlene Farias<sup>2</sup>, Darwin J. Anderson<sup>1</sup> and Michael J. Brewer<sup>3</sup>, <sup>1</sup>Texas A&M AgriLife Research and Extension Center, Corpus Christi, TX, <sup>2</sup>Texas A&M AgriLife Extension Service, Corpus Christi, TX, <sup>3</sup>Texas A&M Univ., Corpus Christi, TX
- 10:37 AM 1-2 Feeding ability of *Zelus tetracanthus* (Hemiptera: Reduviidae) on invasive saltcedar beetles (*Diorhabda carinulata*). **Samantha Kaiser**, samantha\_kaiser@yahoo.com, Beth Ferguson and J. Sunny Evans, Oklahoma State Univ., Stillwater, OK
- 10:49 AM 1-3 Sexual behavior of the resurgent Turkestan cockroach, *Blatta lateralis* (Blattodea: Blattidae). **Manda Sechler**, manda@nmsu.edu and Alvaro Romero, New Mexico State Univ., Las Cruces, NM
- 11:01 AM 1-4 Exploration of the bacterial community of three putative palm phytoplasma vectors. **Chris M. Powell**, cpowell8@patriots.uttyler.edu<sup>1</sup>, Susan Halbert<sup>2</sup> and Blake R. Bextine<sup>1</sup>, <sup>1</sup>Univ. of Texas at Tyler, Tyler, TX, <sup>2</sup>Florida Dept. of Agriculture and Consumer Services, Gainesville, FL
- 11:13 AM 1-5 Monitoring and management of *Culicoides* spp. (Diptera: Ceratopogonidae) in Texas white-tailed deer production facilities. **Cassie A. Schoenthal**, schoenthal@tamu.edu and Roger E. Gold, Texas A&M Univ., College Station, TX

# PROGRAM

**TUESDAY, 25 FEBRUARY 2014 (cont.)**

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- 10:20 AM – 12:01 PM     **STUDENT ORAL COMPETITION:  
MASTER'S STUDENTS**  
Room: Trinidad (1<sup>st</sup> Floor)
- Moderators:     Michael Brewer<sup>1</sup> and Ali Zarrabi<sup>2</sup>, <sup>1</sup>Texas A&M Univ.,  
Corpus Christi, TX, <sup>2</sup>Oklahoma State University, Stillwater,  
OK
- 10:20 AM     Introductory Remarks
- 10:25 AM     **2-1** Identification and manipulation of natural enemies of key  
arthropod pests in Oklahoma vineyards. **Shane McMurry**,  
shane.mcmurry@okstate.edu and Eric Rebek, Oklahoma State  
Univ., Stillwater, OK
- 10:37 AM     **2-2** Grasshopper (Orthoptera: Acrididae) relative abundance and  
density: a comparison between standard and novel methods of  
sampling. **Kenneth E. Masloski**, kenneth.masloski@  
okstate.edu<sup>1</sup>, Carmen Greenwood<sup>2</sup>, Michael Reiskind<sup>3</sup> and  
Mark Payton<sup>1</sup>, <sup>1</sup>Oklahoma State Univ., Stillwater, OK,  
<sup>2</sup>Murray State Univ., Murray, KY, <sup>3</sup>North Carolina State  
Univ., Raleigh, NC
- 10:49 AM     **2-3** A taxonomic and ecological survey study of solifuge species  
within Big Bend National Park, Texas (Class Arachnida:  
Order Solifugae). **David Footle**, dfootle88@yahoo.com,  
Texas A&M AgriLife Research, Bushland, TX
- 11:01 AM     **2-4** Unusual ovipositional behavior of the painted bug, *Bagrada*  
*hilaris* (Hemiptera: Heteroptera: Pentatomidae). **Melise**  
**Taylor**, schmim@nmsu.edu and C. Scott Bundy, New Mexico  
State Univ., Las Cruces, NM
- 11:13 AM     **2-5** Effects of acclimation temperature on the critical thermal  
limits of the tawny crazy ant (*Nylanderia fulva*). **Lance**  
**Umlang**, lanceumlang@shsu.edu<sup>1</sup>, Danny L. McDonald<sup>2</sup> and  
Jerry L. Cook<sup>1</sup>, <sup>1</sup>Sam Houston State Univ., Huntsville, TX,  
<sup>2</sup>Texas A&M Univ., College Station, TX

# PROGRAM

## TUESDAY, 25 FEBRUARY 2014 (cont.)

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- 11:25 AM **2-6** Degree day requirements for the development of *Bactericera cockerelli* (Hemiptera: Triozidae) from South Texas. **Milo Lewis**, mihigh07@gmail.com<sup>1</sup>, Kevin Heinz<sup>1</sup>, Elizabeth Pierson<sup>1</sup> and Jerry Michels<sup>2</sup>, <sup>1</sup>Texas A&M Univ., College Station, TX, <sup>2</sup>Texas A&M Univ., Bushland, TX
- 11:37 AM **2-7** Computational prediction of miRNA regulation in Asian citrus psyllid (*Diaphorina citri*) life stages. **Juan Macias-Velasco**, Juanfmacias3@gmail.com<sup>1</sup>, Ginny Soong<sup>2</sup>, Wayne B. Hunter<sup>3</sup> and Blake R. Bextine<sup>2</sup>, <sup>1</sup>The Univ. of Texas Health Science Center at Tyler, Tyler, TX, <sup>2</sup>Univ. of Texas at Tyler, Tyler, TX, <sup>3</sup>USDA, Agricultural Research Service, Ft. Pierce, FL
- 11:49 AM **2-8** Detection and molecular characterization of phytoplasma in palm and insect host species in Texas and Florida. **Lauren Lambeth**, lauren10\_4@msn.com<sup>1</sup>, Susan Halbert<sup>2</sup> and Blake R. Bextine<sup>1</sup>, <sup>1</sup>Univ. of Texas at Tyler, Tyler, TX, <sup>2</sup>Florida Dept. of Agriculture and Consumer Services, Gainesville, FL
- 12:00 PM - 1:00 PM **Southwestern Branch Executive Committee Lunch**  
Room: Cohiba Boardroom
- 12:00 PM - 1:00 PM **Southwestern Branch Members Box Lunch** (provided)  
Mangos Terrace



# PROGRAM

**TUESDAY, 25 FEBRUARY 2014 (cont.)**

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1:05 PM - 3:50 PM      **SYMPOSIUM I: PSYLLOID VECTORS  
OF LIBERIBACTER DISEASES:  
USA-MEXICO TRANS-BORDER  
ISSUES**  
Room: Romeo & Julieta Ballroom  
(3<sup>rd</sup> Floor)

Moderators and Organizers: Sergio Sanchez-Peña<sup>1</sup> and Raul Villanueva<sup>2</sup>,  
<sup>1</sup>Universidad Autonoma Agraria Antonio Narro,  
Saltillo, Mexico, <sup>2</sup>Texas A&M Agrilife Extension,  
Weslaco, TX

- 1:05 PM            Introductory Remarks
- 1:10 PM      **3-1** U.S. multistate monitoring of the potato psyllid: historical patterns, current issues, and future challenges. **D. Henne**, DCHenne@ag.tamu.edu, Texas A&M Agrilife Research and Extension Center, Weslaco, TX
- 1:30 PM      **3-2** Advances in the management of Asian citrus psyllid in the citrus industry of Mexico. **José I. Lopez-Arroyo**, jila64@yahoo.com, Campo Experimental General Terán, INIFAP, General Terán, Nuevo León, Mexico
- 1:50 PM      **3-3** Overwintering sites of the potato psyllid and complexities of its control in Mexico and South Texas. **Raul Villanueva**, rtvillanueva@ag.tamu.edu<sup>1</sup> and Gabriela Esparza-Díaz<sup>2</sup>, <sup>1</sup>Texas A&M Agrilife Extension, Weslaco, TX, <sup>2</sup>Texas A&M Univ., Weslaco, TX
- 2:10 PM      **3-4** Trans-border management of Asian citrus psyllid at the U.S. – Mexico border. **Mamoudou Setamou**, KUMS2006@tamuk.edu<sup>1</sup>, José I. Lopez-Arroyo<sup>2</sup>, and Sergio Sanchez-Peña<sup>3</sup>, <sup>1</sup>Texas A&M Univ., Kingsville Citrus Center, Weslaco, TX, <sup>2</sup>Campo Experimental General Terán, INIFAP, General Terán, Nuevo León, Mexico, <sup>3</sup>Universidad Autonoma Agraria Antonio Narro, Saltillo, Mexico

# PROGRAM

## TUESDAY, 25 FEBRUARY 2014 (cont.)

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- 2:30 PM            Break
- 2:50 PM        **3-5** Genomic variations in potato psyllids collected in the U.S., Mexico, and Central America. **Blake R. Bextine**, Bbextine@uttyler.edu and Alex Arp, Univ. of Texas at Tyler, Tyler, TX
- 3:10 PM        **3-6** Biological control of psyllids, emphasizing entomopathogenic fungi: border perspectives. **Sergio Sanchez-Peña**, sanchezcheco@gmail.com, Universidad Autonoma Agraria Antonio Narro, Saltillo, Mexico
- 3:30 PM            Discussion
- 1:05 PM - 4:30 PM        **SYMPOSIUM II: ANTS OF TEXAS**  
Room: Trinidad (1<sup>st</sup> Floor)
- Moderators and Organizers: Jon Seal<sup>1</sup> and Danny L. McDonald<sup>2</sup>, <sup>1</sup>Univ. of Texas at Tyler, Tyler, TX, <sup>2</sup>Texas A&M Univ., College Station, TX
- 1:05 PM            Introductory Remarks
- 1:10 PM        **4-1** The Ants of Texas: An introduction to a collaborative myrmecological endeavor. **Danny L. McDonald**, DLMcDonald@ag.tamu.edu, Texas A&M Univ., College Station, TX
- 1:30 PM        **4-2** Is there an “Ants of Texas”? A phylogeographic analysis. **Jon Seal**, trachymyrmex@gmail.com, Univ. of Texas at Tyler, Tyler, TX
- 1:50 PM        **4-3** Features of ants south of (and close to) the Texas border: opportunities for research. **Sergio Sanchez-Peña**, sanchezcheco@gmail.com, Universidad Autonoma Agraria Antonio Narro, Saltillo, Mexico

# PROGRAM

## TUESDAY, 25 FEBRUARY 2014 (cont.)

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- 2:10 PM    **4-4** Sex at the edge of Texas: geographic parthenogenesis in the ant *Platythyrea punctata*. **Katrin Kellner**, antkatrina@gmail.com, Univ. of Texas at Austin, Austin, TX
- 2:30 PM    Break
- 2:50 PM    **4-5** The ants of the Fort Worth Nature Center in Fort Worth, Texas: What's structuring their assemblages? **Ann B. Mayo**, amayo@uta.edu, Univ. of Texas at Arlington, Arlington, TX
- 3:10 PM    **4-6** The reproductive flight phenology of *Nylanderia fulva* (Hymenoptera: Formicidae) in southeast Texas. **Danny L. McDonald**, DLMcDonald@ag.tamu.edu, Texas A&M Univ., College Station, TX
- 3:30 PM    **4-7** Morphology influences thermal tolerance in *Pogonomyrmex barbatus*. **Robin Verble-Pearson**, robin.verble@ttu.edu, Texas Tech, Lubbock, TX
- 3:50 PM    **4-8** Morphology of the male genitalia of *Brachymyrmex*, and their implications to the Formicine phylogeny. **Christopher M. Wilson**, cmw034@shsu.edu, Sam Houston State Univ., Huntsville, TX
- 4:10 PM    Discussion
- 7:00 AM - 4:30 PM    **STUDENT POSTER COMPETITION:  
BACHELOR'S STUDENTS**  
Room: Monte Cristo B (1<sup>st</sup> Floor)
- P1-1**    Analyzing the diet of the Texas field cricket using lab and field based approaches (Orthoptera: Gryllidae: *texensis*). **Kerstin Alander**, KNAlander@gmail.com<sup>1</sup>, Rebecca Clark<sup>2</sup> and Spence Behmer<sup>2</sup>, <sup>1</sup>Texas A&M Univ., Bryan, TX, <sup>2</sup>Texas A&M Univ., College Station, TX

# PROGRAM

## TUESDAY, 25 FEBRUARY 2014 (cont.)

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- P1-2** Field trial of entomopathogenic fungi against Asian citrus psyllid (*Diaphorina citri*) in General Terán, Nuevo León, Mexico. **Jose Rodriguez-Contreras**, pepe\_712\_91@msn.com<sup>1</sup>, Fernando Sanchez-Pedraza<sup>1</sup>, Celso Morales-Reyes<sup>1</sup>, José I. Lopez-Arroyo<sup>2</sup> and Sergio Sanchez-Peña<sup>1</sup>, <sup>1</sup>Universidad Autonoma Agraria Antonio Narro, Saltillo, Mexico, <sup>2</sup>Campo Experimental General Terán, INIFAP, General Terán, Nuevo León, Mexico
- P1-3** Morphological description of *Monoctenus sanchezzi* male (Hymenoptera: Diprionidae). **Salvador Ordaz**, ordaz\_silva@hotmail.com<sup>1</sup>, Gabriel Gallegos<sup>1</sup>, Sergio Sanchez-Peña<sup>1</sup>, Rebeca Gonzalez<sup>1</sup>, Jeronimo Landeros<sup>1</sup> and Macotulio Soto<sup>2</sup>, <sup>1</sup>Universidad Autonoma Agraria Antonio Narro, Saltillo, Mexico, <sup>2</sup>Instituto de Ecología A. C., Xalapa, Mexico
- P1-4** The effectiveness of different primer sets on detecting the presence of *Trypanosoma cruzi* in *Triatoma gerstaeckeri*. **Ashley Greenlee**, agreenlee@patriots.uttyler.edu<sup>1</sup>, Chissa-Louise Rivaldi<sup>1</sup>, Blake R. Bextine<sup>1</sup>, G. Schuster<sup>2</sup> and Scott Henke<sup>2</sup>, <sup>1</sup>Univ. of Texas at Tyler, Tyler, TX, <sup>2</sup>Texas A&M Univ. at Kingsville, Kingsville, TX
- P1-5** Movement of entomopathogenic nematodes (*Heterorhabditis* spp. and *Steinernema carpocapsae*) in non-sterile substrate under laboratory conditions. **Antonio Padilla**, obed\_taw.777@hotmail.com, Luis Rojas, Fausto Ortiz, Gerardo Franco, Gregorio Estrada, Yuliana Anzures and Sergio Sanchez-Peña, Universidad Autonoma Agraria Antonio Narro, Saltillo, Mexico
- P1-6** Detection of phytoplasma in plant and insect hosts causing Lethal Yellow and Texas Phoenix Palm Decline in Florida. **Mikayla Adkison**, madkison@patriots.uttyler.edu<sup>1</sup>, Lauren Lambeth<sup>1</sup>, Susan Halbert<sup>2</sup> and Blake R. Bextine<sup>1</sup>, <sup>1</sup>Univ. of Texas at Tyler, Tyler, TX, <sup>2</sup>Florida Dept. of Agriculture and Consumer Services, Gainesville, FL

# PROGRAM

**TUESDAY, 25 FEBRUARY 2014 (cont.)**

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**P1-7** Determining genetic structure of the painted bug (*Bagrada hilaris*) populations. **MacKenzie F. Patton**, mpatton3@patriots.uttyler.edu<sup>1</sup>, Chris M. Powell<sup>1</sup>, Darcy A. Reed<sup>2</sup>, Thomas M. Perring<sup>2</sup> and Blake R. Bextine<sup>1</sup>, <sup>1</sup>Univ. of Texas at Tyler, Tyler, TX, <sup>2</sup>Univ. of California, Riverside, CA

7:00 AM - 4:30 PM

**STUDENT POSTER COMPETITION:  
MASTER'S STUDENTS**  
Room: Monte Cristo B (1<sup>st</sup> Floor)

**P2-1** Where the wind comes sweepin' down the plain: an update on vector-borne disease research in Oklahoma. **Jaclyn Martin**, jaclyn.e.martin@okstate.edu<sup>1</sup> and Bruce Noden<sup>2</sup>, <sup>1</sup>Oklahoma State Univ., Stillwater, OK, <sup>2</sup>Polytechnic of Namibia, Windhoek, Namibia

**P2-2** Biological control of juniper sawfly (*Monoctenus sanchezi* Smith) (Hymenoptera: Diprionidae) *in vitro*. **Salvador Ordaz**, ordaz\_silva@hotmail.com, Gabriel Gallegos, Sergio Sanchez, Jeronimo Landeros, Livier Guizar and Melchor Cepeda, Universidad Autonoma Agraria Antonio Narro, Saltillo, Mexico

**P2-3** Single imidacloprid drench and control of *Diorhabda* on athel tree (*Tamarix aphylla*) at Ojinaga, Chihuahua, Mexico. **Gregorio Estrada**, gaem24@hotmail.com and Sergio R. Sanchez-Peña, Universidad Autonoma Agraria Antonio Narro, Saltillo, Mexico

**P2-4** CO<sub>2</sub> emission from fed or starved *Reticulitermes flavipes* (Isoptera: Rhinotermitidae). **Charles Konemann**, charles.e.konemann@okstate.edu, Shiping Deng and Brad Kard, Oklahoma State Univ., Stillwater, OK

**P2-5** Identification of the gut microbiome of *Triatoma gerstaeckeri* using next generation sequencing. **Chissa-Louise Rivaldi**, crivaldi@patriots.uttyler.edu<sup>1</sup>, Chris Powell<sup>1</sup>, Ashley Greenlee<sup>1</sup>, G. Schuster<sup>2</sup>, Scott Henke<sup>2</sup> and Blake R. Bextine<sup>1</sup>, <sup>1</sup>Univ. of Texas at Tyler, Tyler, TX, <sup>2</sup>Texas A&M Univ. at Kingsville, Kingsville, TX

# PROGRAM

## TUESDAY, 25 FEBRUARY 2014 (cont.)

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- P2-6** Behavior of experienced and inexperienced *Diaeretiella rapae* (Hymenoptera: Braconidae) exposed to winter wheat and canola. **Beth Ferguson**, beth.ferguson@okstate.edu<sup>1</sup>, Tom A. Royer<sup>1</sup>, Kris Giles<sup>1</sup> and Norman Elliott<sup>2</sup>, <sup>1</sup>Oklahoma State Univ., Stillwater, OK, <sup>2</sup>USDA, Agricultural Research Service, Stillwater, OK
- P2-7** Comparison of potato psyllids (*Bactericera cockerelli*) populations from North America and Central America. **Amalia Lopez**, amalia8@gmail.com<sup>1</sup>, Daymon Hail<sup>1</sup>, Joseph Munyaneza<sup>2</sup> and Blake R. Bextine<sup>1</sup>, <sup>1</sup>Univ. of Texas at Tyler, Tyler, TX, <sup>2</sup>USDA-ARS, Wapato, WA
- P2-8** Regulation of *Solenopsis invicta* virus-1 by RNA interference in the red imported fire ant. **Patrick Rydzak**, rydzakp@gmail.com<sup>1</sup>, Wayne B. Hunter<sup>2</sup> and Blake R. Bextine<sup>1</sup>, <sup>1</sup>Univ. of Texas at Tyler, Tyler, TX, <sup>2</sup>USDA, Agricultural Research Service, Ft. Pierce, FL
- P2-9** Inoculation of bean with endophytic *Metarhizium brunneum*: lack of strong effects on whitefly, *Trialeurodes vaporariorum*. **Karla Cruz-Aldaco**, aldacokarla@gmail.com, Denisse Ramirez-Rodriguez and Sergio Sanchez-Peña, Universidad Autonoma Agraria Antonio Narro, Saltillo, Mexico
- P2-10** Oral delivery assay of double - stranded RNAs (RNAi constructs) in the potato/tomato psyllid, *Bactericera cockerelli*. **Bijaya Sharma**, sharmabijaya1@gmail.com<sup>1</sup>, Daymon Hail<sup>1</sup>, Wayne B. Hunter<sup>2</sup> and Blake R. Bextine<sup>1</sup>, <sup>1</sup>Univ. of Texas at Tyler, Tyler, TX, <sup>2</sup>USDA, Agricultural Research Service, Ft. Pierce, FL

# PROGRAM

## TUESDAY, 25 FEBRUARY 2014 (cont.)

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7:00 AM - 4:30 PM

### STUDENT POSTER COMPETITION: PH.D. STUDENTS

Room: Monte Cristo B (1<sup>st</sup> Floor)

- P3-1** First report of the invasive leafhopper, *Balclutha rubrostriata*, in Oklahoma. **Sharon Andreason**, sharon.andreason@okstate.edu and Astri Wayadande, Oklahoma State Univ., Stillwater, OK
- P3-2** Levels of phosphine resistance in populations of *Cryptolestes ferrugineus* (Stephens) (Coleoptera: Laemophloeidae) from stored grain in Oklahoma. **Nisha Bajracharya**, nisha.shakya10@okstate.edu, George Opit and Charles Konemann, Oklahoma State Univ., Stillwater, OK
- P3-3** Investigating possible routes of fumigant penetration into eggs of *Carpophilus hemipterus* (Coleoptera: Nitidulidae) and *Plodia interpunctella* (Lepidoptera: Pyralidae) using osmium tetroxide as a model molecule. **Sandipa G. Gautam**, sandipa.gautam@okstate.edu<sup>1</sup>, Spencer Walse<sup>2</sup>, Dennis Margosan<sup>2</sup> and George P. Opit<sup>1</sup>, <sup>1</sup>Oklahoma State Univ., Stillwater, OK, <sup>2</sup>USDA, Agricultural Research Service, Parlier, CA
- P3-4** Quantification of the physiological impact of Hessian fly (*Mayetiola destructor*) feeding on post-vernalization winter wheat. **Holly N. Davis**, holly3@ksu.edu<sup>1</sup>, R. Jeff Whitworth<sup>1</sup>, Ming-Shun Chen<sup>2</sup> and Gary Cramer<sup>3</sup>, <sup>1</sup>Kansas State Univ., Manhattan, KS, <sup>2</sup>USDA-ARS-NPA-GMPRC-PSERU, Manhattan, KS, <sup>3</sup>Kansas State Univ., Hutchinson, KS
- P3-5** Habitat, trap-type, and seasonal associations of nine endemic insects of the Monahans Dune System. **Samuel Discua**, samuel.discua@ttu.edu, Scott Longing and James Cokendolpher, Texas Tech Univ., Lubbock, TX
- P3-6** The role of insect succession in composted and non-composted beef cadavers and the effect of composting on volatile organic compounds. **Trisha Dubie**, trishd@okstate.edu, Justin Talley and Astri Wayadande, Oklahoma State Univ., Stillwater, OK

# PROGRAM

## TUESDAY, 25 FEBRUARY 2014 (cont.)

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**P3-7** Seed treatment of beans, *Phaseolus vulgaris*, with endophytic *Beauveria bassiana*, and whitefly population dynamics: is there an effect?. **Denisse Ramirez-Rodriguez**, dramirez123@gmail.com, Karla Cruz-Aldaco and Sergio R. Sanchez-Peña, Universidad Autonoma Agraria Antonio Narro, Saltillo, Mexico

4:30 PM - 6:00 PM      **Student Poster Takedown**  
Room: Monte Cristo B

5:00 PM - 7:00 PM      **Linnaean Games (Prelims)**  
Room: Romeo & Julieta Ballroom

6:00 PM - 8:00 PM      **Regular Poster Set-up**  
Room: Monte Cristo B

7:00 PM - 10:00 PM    **Student Mixer**  
Mangos Terrace



# PROGRAM

**WEDNESDAY, 26 FEBRUARY 2014**

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- 6:00 AM – 8:00 AM      **Breakfast** (on your own)  
Mangos Restaurant
- 7:00 AM – 2:00 PM      **Registration**  
Lobby
- 7:00 AM – 5:00 PM      **Job Opportunities**  
Room: Partagas
- 7:00 AM – 2:00 PM      **Presentation Upload and Preview**  
Room: Partagas
- 7:30 AM – 5:00 PM      **Entomological Foundation Silent Auction**  
Room: Partagas
- 7:25 AM – 12:00 PM      **SYMPOSIUM III: BIOLOGICAL  
CONTROL OF SALT CEDAR: RANGE  
EXPANSION AND FUTURE  
RESEARCH PRIORITIES IN THE  
SOUTHWESTERN U.S.**  
Room: Romeo & Julieta Ballroom  
(3<sup>rd</sup> Floor)
- Moderators and Organizers: James Tracy<sup>1</sup> and J. Sunny Evans<sup>2</sup>, <sup>1</sup>Texas A&M  
Univ., College Station, TX, <sup>2</sup>Oklahoma State Univ.,  
Stillwater, OK
- 7:25 AM                  Introductory Remarks

# PROGRAM

## WEDNESDAY, 26 FEBRUARY 2014 (cont.)

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- 7:30 AM    **5-1** Twelve years of progress on biological control of saltcedar in the western U.S.: 2001–2013. **C. Jack DeLoach**, jack.deloach@hotmail.com<sup>1</sup>, Allen Knutson<sup>2</sup>, G. J. Michels<sup>3</sup>, Mark Muegge<sup>4</sup>, Chris Ritzi<sup>5</sup> and James Tracy<sup>6</sup>, <sup>1</sup>Agricultural Research Service, Temple, TX, <sup>2</sup>Texas A&M Univ., Dallas, TX <sup>3</sup>Texas AgriLife Research Center, Bushland, TX, <sup>4</sup>Texas A&M Univ., Fort Stockton, TX, <sup>5</sup>Sul Ross State Univ., Alpine, TX, <sup>6</sup>Texas A&M Univ., College Station, TX
- 7:50 AM    **5-2** Ecological niche modeling of North American distributions for tamarisk beetles. **James Tracy**, JamesLTracy@tamu.edu<sup>1</sup>, Allen Knutson<sup>2</sup> and Robert Coulson<sup>1</sup>, <sup>1</sup>Texas A&M Univ., College Station, TX, <sup>2</sup>Texas A&M Univ., Dallas, TX
- 8:10 AM    **5-3** Establishment and dispersal of tamarisk beetles (*Diorhabda* spp.) on the Rio Grande in Trans-Pecos, Texas to control saltcedar (*Tamarix ramosissima*/*T. chinensis*) and non-target impacts on athel (*Tamarix aphylla*). **Chris Ritzi**, critzi@sulross.edu<sup>1</sup>, Ann Marie Hilscher<sup>1</sup>, C. Jack DeLoach<sup>2</sup> and James Tracy<sup>3</sup>, <sup>1</sup>Sul Ross State Univ., Alpine, TX, <sup>2</sup>USDA, Agricultural Research Service, Temple, TX, <sup>3</sup>Texas A&M Univ., College Station, TX
- 8:30 AM    **5-4** Establishment and dispersal of saltcedar leaf beetles in Texas and potential impact of red imported fire ant. **Allen Knutson**, a-knutson@tamu.edu<sup>1</sup>, Mark Muegge<sup>2</sup>, G. J. Michels<sup>3</sup>, E.N. Jones<sup>4</sup>, Chris Ritzi<sup>5</sup> and James Tracy<sup>6</sup>, <sup>1</sup>Texas A&M Univ., Dallas, TX, <sup>2</sup>Texas A&M Univ., Fort Stockton, TX, <sup>3</sup>Texas AgriLife Research Center, Bushland, TX, <sup>4</sup>Texas A&M Univ., Bushland, TX, <sup>5</sup>Sul Ross State Univ., Alpine, TX, <sup>6</sup>Texas A&M Univ., College Station, TX
- 8:50 AM    **5-5** Monitoring *Diorhabda carinata* establishments in the Texas Panhandle. **G. J. Michels**, asychis@aol.com<sup>1</sup>, E.N. Jones<sup>2</sup>, Rachel Lange<sup>3</sup>, J. B. Bible<sup>1</sup>, and Jackie Brazille<sup>3</sup>, <sup>1</sup>Texas AgriLife Research Center, Bushland, TX, <sup>2</sup>Texas A&M Univ., Bushland, TX, <sup>3</sup>Texas A&M AgriLife Research, Amarillo, TX
- 9:10 AM    Break

# PROGRAM

## WEDNESDAY, 26 FEBRUARY 2014 (cont.)

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- 9:40 AM **5-6** Distribution of the larger tamarisk beetle, *Diorhabda carinata*, in Oklahoma and potential impacts on arthropod predator food webs. **J. Sunny Evans**, ejessis@okstate.edu and Tom A. Royer, Oklahoma State Univ., Stillwater, OK
- 10:00 AM **5-7** Tamarisk beetle hunting in New Mexico—they're here. **Carol Sutherland**, csutherl@nmsu.edu, New Mexico Dept. of Agriculture, NM
- 10:20 AM **5-8** Status of larger tamarisk beetles, *Diorhabda carinata*, in Kansas. **Sarah Zuckoff**, Kansas State Univ., KS
- 10:40 AM **5-9** Phenology, phylogeny, and research priorities for four *Diorhabda* species established for tamarisk biocontrol. **Dan W. Bean**, dan.bean@state.co.us, Colorado Dept. of Agriculture, Palisade, CO
- 11:00 AM **5-10** Update on morphological evidence of field hybridization among three species of tamarisk beetles (*Diorhabda* spp.) established in Texas, New Mexico, Oklahoma, and Kansas for biological control of saltcedar (*Tamarix* spp.). **James Tracy**, JamesLTracy@tamu.edu<sup>1</sup>, Robert Coulson<sup>1</sup>, G. J. Michels<sup>2</sup>, Allen Knutson<sup>3</sup>, Chris Ritzi<sup>4</sup>, Ann Marie Hilscher<sup>4</sup>, Mark Muegge<sup>5</sup>, Tom A. Royer<sup>6</sup> and E.N. Jones<sup>7</sup>, <sup>1</sup>Texas A&M Univ., College Station, TX, <sup>2</sup>Texas AgriLife Research Center, Bushland, TX, <sup>3</sup>Texas A&M Univ., Dallas, TX, <sup>4</sup>Sul Ross State Univ., Alpine, TX, <sup>5</sup>Texas A&M Univ., Fort Stockton, TX, <sup>6</sup>Oklahoma State Univ., Stillwater, OK, <sup>7</sup>Texas A&M Univ., Bushland, TX
- 11:20 AM **5-11** Panel discussion: Future prospects for cooperative research related to biological control of saltcedar. **Chris Ritzi**, critzi@sulross.edu<sup>1</sup>, C. Jack DeLoach<sup>2</sup>, Allen Knutson<sup>3</sup>, Dan W. Bean<sup>4</sup>, G. J. Michels<sup>5</sup> and James Tracy<sup>6</sup>, <sup>1</sup>Sul Ross State Univ., Alpine, TX, <sup>2</sup>USDA, Agricultural Research Service, Temple, TX, <sup>3</sup>Texas A&M Univ., Dallas, TX, <sup>4</sup>Colorado Dept. of Agriculture, Palisade, CO, <sup>5</sup>Texas AgriLife Research Center, Bushland, TX, <sup>6</sup> Texas A&M Univ., College Station, TX

# PROGRAM

**WEDNESDAY, 26 FEBRUARY 2014 (cont.)**

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7:35 AM – 12:00 PM      **SYMPOSIUM IV: WHAT IS NEW  
WITH URBAN PESTS IN THE  
SOUTHWEST?**  
Room: Trinidad (1<sup>st</sup> Floor)

Moderators and Organizers: Alvaro Romero<sup>1</sup>, Robert Davis<sup>2</sup> and Robert T. Puckett<sup>3</sup>, <sup>1</sup>New Mexico State Univ., Las Cruces, NM, <sup>2</sup>BASF Corporation, Pflugerville, TX, <sup>3</sup>Texas A&M Univ., College Station, TX

- 7:35 AM                    Introductory Remarks
- 7:40 AM                    **6-1** Developing an IPM program for bed bugs in homeless shelters. **Michael Merchant**, m-merchant@tamu.edu<sup>1</sup>, Wizzie Brown<sup>2</sup>, Paul Nester<sup>3</sup>, Charles Helpert<sup>1</sup>, and Molly E. Keck<sup>4</sup>, <sup>1</sup>Texas A&M AgriLife Extension Service, Dallas, TX, <sup>2</sup>Texas A&M AgriLife Extension Service, Austin, TX, <sup>3</sup>Texas A&M AgriLife Extension Service, Houston, TX, <sup>4</sup>Texas A&M AgriLife Extension, San Antonio, TX
- 8:10 AM                    **6-2** Comparison of effectiveness of insecticides to bed bugs in different substrates. **Brittney Blakely**, brittnyb@nmsu.edu and Alvaro Romero, New Mexico State Univ., Las Cruces, NM
- 8:40 AM                    **6-3** A new public health insecticide for control of adult mosquitos. **Kurt Vandock**, kurtv@bgsu.edu<sup>1</sup> and John Rowland<sup>2</sup>, Bowling Green State Univ., Bowling Green, OH, <sup>2</sup>Bayer, Austin, TX
- 9:10 AM                    Break
- 9:40 AM                    **6-4** Field efficacy trial for Termidor<sup>®</sup> dry applied to tree voids infested with subterranean termites (Isoptera: Rhinotermitidae). **Chris Keefer**, tckeefer@ag.tamu.edu and Roger E. Gold, Texas A&M Univ., College Station, TX

# PROGRAM

## WEDNESDAY, 26 FEBRUARY 2014 (cont.)

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- 10:10 AM    **6-5** Turkestan cockroach: A resurgent cockroach in the Southwest United States. **Alvaro Romero**, aromero2@nmsu.edu and Manda Sechler, New Mexico State Univ., Las Cruces, NM
- 10:40 AM    **6-6** Alpine<sup>®</sup> WSG insecticide: a broad spectrum, non-repellent product for control of nuisance pests associated with structures. **Robert Davis**, robert.davis@basf.com<sup>1</sup>, Robert Hickman<sup>2</sup>, Jason Meyers<sup>3</sup> and Kyle Jordan<sup>4</sup>, <sup>1</sup>BASF Corporation, Pflugerville, TX, <sup>2</sup>BASF Pest Control Solutions, Maitland, FL, <sup>3</sup>BASF Specialty Products, Kansas City, MO, <sup>4</sup>BASF Corporation, Atlanta, GA
- 11:10 AM    **6-7** Tawny crazy ants (*Nylanderia fulva*): invasion history, biology, behavior, and management in urban landscapes. **Robert T. Puckett**, rpuck@tamu.edu and Roger E. Gold, Texas A&M Univ., College Station, TX
- 11:40 AM    Discussion
- 12:00 PM - 1:00 PM    **Lunch** (on your own)
- 1:05 PM – 4:50 PM    **SYMPOSIUM V: EMERGING PESTS  
IN THE SOUTHWEST AND IPM  
SOLUTIONS**  
Room: Romeo & Julieta Ballroom  
(3<sup>rd</sup> Floor)
- Moderators and Organizers: Juliana Rangel-Posada and Suhas Vyavhare, Texas A&M Univ., College Station, TX
- 1:05 PM    Introductory Remarks
- 1:10 PM    **7-1** Monitoring, identification, and management of the spotted wing drosophila, *Drosophila suzukii*. **Jackie Lee**, Oklahoma State University, Stillwater, OK

# PROGRAM

## WEDNESDAY, 26 FEBRUARY 2014 (cont.)

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- 1:30 PM     **7-2** Switching from predaceous to pest: a new invasive bug affecting vegetables in the Rio Grande Valley. **Raul Villanueva**, rtvillanueva@ag.tamu.edu, Texas A&M Agrilife Extension, Weslaco, TX
- 1:50 PM     **7-3** IPM and the tawny crazy ant. **Paul Nester**, p-nester@tamu.edu, Texas A&M AgriLife Extension Service, Houston, TX
- 2:10 PM     **7-4** Community-wide fire ant management projects. **Wizzie Brown**, ebrown@ag.tamu.edu, Texas A&M AgriLife Extension Service, Austin, TX
- 2:30 PM     **7-5** Outbreak of sorghum/sugarcane aphid on sorghum: first detections, distribution, and notes on management. **Michael J. Brewer**, mjbrewer@ag.tamu.edu<sup>1</sup>, M. O. Way<sup>2</sup>, David W. Ragsdale<sup>3</sup>, J. Scott Armstrong<sup>4</sup>, Stephen Biles<sup>5</sup>, Danielle Sekula<sup>6</sup>, Allen Knutson<sup>7</sup>, Raul Villanueva<sup>6</sup>, Roy Parker<sup>8</sup>, and Gary N. Odvody<sup>8</sup>, <sup>1</sup>Texas A&M Univ., Corpus Christi, TX, <sup>2</sup>Texas AgriLife Extension Service, Beaumont, TX, <sup>3</sup>Texas A&M University, College Station, TX, <sup>4</sup>USDA, Agricultural Research Service, Stillwater, OK, <sup>5</sup>Texas A&M AgriLife Extension Service, Port Lavaca, TX, <sup>6</sup>Texas A&M Agrilife Extension Service, Weslaco, TX, <sup>7</sup>Texas A&M Univ., Dallas, TX, <sup>8</sup>Texas A&M AgriLife Extension Service, Corpus Christi, TX
- 2:50 PM     Break
- 3:10 PM     **7-6** Sugarcane aphid outbreaks in sorghum: observations from Louisiana. **David L. Kerns**, dkerns@agcenter.lsu.edu, LSU AgCenter, Winnsboro, LA
- 3:30 PM     **7-7** Identifying host-plant resistance in sorghum, and sorghum-like genotypes for the sugarcane aphid. **J. Scott Armstrong**, scott.armstrong@ars.usda.gov, USDA, Agricultural Research Service, Stillwater, OK

# PROGRAM

## WEDNESDAY, 26 FEBRUARY 2014 (cont.)

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- 3:50 PM    **7-8** Preliminary evaluation of parasitic wasps parasitizing the sugarcane aphid. **Norman Elliott**, norman.elliott@ars.usda.gov, USDA, Agricultural Research Service, Stillwater, OK
- 4:10 PM    **7-9** IPM of the red-banded stink bug. **Suhas Vyavhare**, suhas.vyavhare@yahoo.com, Texas A&M Univ., College Station, TX
- 4:30 PM    **7-10** IPM methods for control of *Varroa destructor* in southeastern Texas apiaries. **Alejandro Martinez**, alex143@neo.tamu.edu, Texas A&M Univ., College Station, TX

1:30 PM –5:00 PM                    **REGULAR PAPERS**  
Room: Monte Cristo A (1<sup>st</sup> Floor)

Moderators: Chris Sansone<sup>1</sup> and William Miller<sup>2</sup>, <sup>1</sup>Bayer CropScience, Research Triangle Park, NC, <sup>2</sup>U.S. Army Environmental Command, Fort Sam Houston, TX

- 1:30 PM                    Introductory Remarks
- 1:35 PM    **8-1** Extension's changing role - response to emerging critical issues. **Charles Allen**, ctallen@ag.tamu.edu, Texas A&M Univ., San Angelo, TX
- 1:47 PM    **8-2** Prevalence of *Nosema* in feral honey bee colonies in South Texas: A 20-year survey. **Juliana Rangel-Posada**, Juliana.Rangel-Posada@ag.tamu.edu, Texas A&M Univ., College Station, TX
- 1:59 PM    **8-3** Toxic activity of essential oils against the Asian citrus psyllid, *Diaphorina citri*. **Ninfa M. Rosas-Garcia**, nrosas@ipn.mx, Centro de Biotecnología Genómica, Instituto Politécnico Nacional (CBG-IPN), Reynosa, Mexico

# PROGRAM

## WEDNESDAY, 26 FEBRUARY 2014 (cont.)

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- 2:11 PM     **8-4** Effects of cut cedar on mosquito populations. **Molly E. Keck**, mekeck@ag.tamu.edu<sup>1</sup> and Bryan McDowell<sup>2</sup>, <sup>1</sup>Texas A&M AgriLife Extension, San Antonio, TX, <sup>2</sup>Texas A&M Univ., College Station, TX
- 2:23 PM     **8-5** Intraguild dynamics between exotic and native coccinellidae larvae: the influence of aphid parasitism level. **Kris Giles**, kgiles@okstate.edu<sup>1</sup> and Kody Mullins<sup>2</sup>, <sup>1</sup>Oklahoma State Univ., Stillwater, OK, <sup>2</sup>Shorter Univ., Rome, GA
- 2:35 PM     **8-6** Adult Hessian fly (*Mayetiola destructor*) flight patterns in Oklahoma. **Nathan Bradford**, nathan.bradford@okstate.edu, Oklahoma State Univ., Stillwater, OK
- 2:47 PM     Break
- 3:10 PM     **8-7** Impact of different densities of western flower thrips, *Frankliniella occidentalis* (Pergande) (Thysanoptera: Thripidae), on seedling cotton . **Abdul Hakeem**, abdul.hakeem@ag.tamu.edu, Megha N. Parajulee, Jane Dever, Mark Arnold, Stanley C. Carroll and Richard Norman, Texas A&M AgriLife Research and Extension Center, Lubbock, TX
- 3:22 PM     **8-8** Development of a binomial sampling plan for thrips in cotton. **Mark Muegge**, mmuegge@ag.tamu.edu<sup>1</sup> and David L. Kerns<sup>2</sup>, <sup>1</sup>Texas A&M Agrilife Extension, Fort Stockton, TX, <sup>2</sup>LSU AgCenter, Winnsboro, LA
- 3:34 PM     **8-9** Preliminary evaluation of stable fly populations in central Texas. **Sonja L. Swiger**, slswiger@ag.tamu.edu, Texas A&M AgriLife Extension Service, Stephenville, TX
- 3:46 PM     **8-10** Surveillance for the larvae of cattle fever ticks (*Boophilus microplus*: Ixodidae) in south Texas pastures. **Don Thomas**, donald.thomas@ars.usda.gov and John A. Goolsby, USDA, Agricultural Research Service, Edinburg, TX



# PROGRAM

## WEDNESDAY, 26 FEBRUARY 2014 (cont.)

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7:00 AM –5:00 PM

### Regular Posters

Room: Monte Cristo B (1<sup>st</sup> Floor)

- P4-1** Laboratory evaluation of prey stage preference, mutual interference, and functional response of *Tamarixia triozae* (Burks) to *Bactericera cockerelli* (Sulc) on tomato and bell pepper. **Xiangbing Yang**, xiang.yang@ag.tamu.edu<sup>1</sup>, Manuel Campos<sup>1</sup>, Adrian Silva<sup>2</sup> and D. Henne<sup>1</sup>, <sup>1</sup>Texas A&M Agrilife Research and Extension Center, Weslaco, TX, <sup>2</sup>Texas A&M Univ, Weslaco, TX
- P4-2** Insecticide efficacy trials on potato psyllid, *Bactericera cockerelli*, in the lower Rio Grande Valley of Texas. **Manuel Campos**, manuel.campos@ag.tamu.edu and D. Henne, Texas A&M Agrilife Research and Extension Center, Weslaco, TX
- P4-3** Transmission potential of the zebra chip disease pathogen, *Candidatus Liberibacter solanacearum*, by whitefly and thrips on potato. **Xiangbing Yang**, xiang.yang@ag.tamu.edu<sup>1</sup>, Manuel Campos<sup>1</sup>, Joseph Munyaneza<sup>2</sup> and D. Henne<sup>1</sup>, <sup>1</sup>Texas A&M Agrilife Research and Extension Center, Weslaco, TX, <sup>2</sup>USDA, Agricultural Research Service, Wapato, WA
- P4-4** Joint action of foliage powders of *Peumus boldus* Mol., *Laurelia sempervirens* L. and *Laureliopsis philippiana* Rut et Pau (Laurales:Monimiaceae) against *Sitophilus zeamais* Motschulsky (Coleoptera:Curculionidae). **Gonzalo Silva**, gosilva@udec.cl<sup>1</sup>, María Baeza<sup>1</sup>, Ines Figueroa<sup>1</sup>, Angelica Urbina<sup>1</sup> and J. Concepcion Rodriguez<sup>2</sup>, <sup>1</sup>Univ. of Concepcion, Chillan, Chile, <sup>2</sup>Colegio de Postgraduados en Ciencias Agrícolas, Texcoco, Mexico
- P4-5** Effects of constant temperatures and relative humidities on population growth of three morphs of *Liposcelis bostrychophila* (Psocoptera Liposcelididae). George P. Opit, Kandara Shakya, Sandipa G. Gautam and **Sulochana Paudyal**, sulochana.paudyal@okstate.edu, Oklahoma State Univ., Stillwater, OK

# PROGRAM

## WEDNESDAY, 26 FEBRUARY 2014 (cont.)

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- P4-6** SEM imaging combined with SEM-EDS analysis enables prediction of resistance of sorghum to storage insects. Michael W. Pendleton<sup>1</sup>, **Bonnie B. Pendleton**, bpendleton@wtamu.edu<sup>2</sup>, E. Ann Ellis<sup>3</sup>, and Niamoye Yaro<sup>4</sup>, <sup>1</sup>Texas A&M Univ., College Station, TX, <sup>2</sup>West Texas A&M Univ., Canyon, TX, <sup>3</sup>Microscopy Consulting Technologists, Thomasville, GA, <sup>4</sup>Institut D'Economie Rurale, Bamako, Mali
- P4-7** Efficacy of spinosad and a combination of chlorpyrifos-methyl and deltamethrin against five pest species of psocids (Psocoptera) on wheat. **George P. Opit**, george.opit@okstate.edu, Nirajan Bhattarai, Sandipa G. Gautam and Sulochana Paudyal, Oklahoma State Univ., Stillwater, OK
- P4-8** Tawny crazy ant, *Nylanderia fulva*, management efforts in Texas commercial pecan orchards. **Bill Ree**, w-ree@tamu.edu<sup>1</sup>, Paul Nester<sup>2</sup> and John Gordy<sup>3</sup>, <sup>1</sup>Texas A&M AgriLife Extension Service, Bryan, TX, <sup>2</sup>Texas A&M AgriLife Extension Service, Houston, TX <sup>3</sup>,Texas A&M AgriLife Extension Service, Angleton, TX
- P4-9** Reducing the impact of the red imported fire ant (*Solenopsis invicta* Buren) at the Toyota Texas Bass Classic, Conroe, TX – a four year enquiry. **Paul Nester**, p-nester@tamu.edu<sup>1</sup> and Michael Heimer<sup>2</sup>, <sup>1</sup>Texas A&M AgriLife Extension Service, Houston, TX, <sup>2</sup>Texas A&M AgriLife Extension Service, Conroe, TX
- P4-10** Field cage release of *Jaapiella ivannikovi* in Otero County, New Mexico. **Joshua R. Brown**, joshbro@nmsu.edu, C. Scott Bundy and David C. Thompson, New Mexico State Univ., Las Cruces, NM
- P4-11** Changes in incidence of *Trypanosoma cruzi* in New Mexico Triatomines. **Jane Breen Pierce**, japierce@nmsu.edu<sup>1</sup>, Steve F. Hanson<sup>2</sup> and Derik Bendixsen<sup>1</sup>, <sup>1</sup>New Mexico State Univ., Artesia, NM, <sup>2</sup>New Mexico State Univ., Las Cruces, NM

# PROGRAM

## WEDNESDAY, 26 FEBRUARY 2014 (cont.)

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- P4-12** A risk assessment for dengue transmission in Namibia. **Bruce Noden**, bruce.noden@okstate.edu<sup>1</sup>, Milka Musuu<sup>1</sup>, Larai Aku-Akai<sup>1</sup>, Berta van der Colf<sup>1</sup>, Israel Chipare<sup>2</sup> and Rob Wilkinson<sup>2</sup>, <sup>1</sup>Polytechnic of Namibia, Windhoek, Namibia, <sup>2</sup>Blood Transfusion Service of Namibia, Windhoek, Namibia
- P4-13** Evaluation of winter wheat (*Triticum aestivum* L.) germplasm for resistance against bird cherry oat aphid (*Rhopalosiphum padi* L.). **Ali Zarrabi**, ali.zarrabi@okstate.edu<sup>1</sup>, Kris Giles<sup>1</sup>, Dayna Collett<sup>1</sup>, Brett Carver<sup>1</sup>, S. Seuhs<sup>1</sup>, David Worrall<sup>2</sup>, J. Scott Armstrong<sup>3</sup> and Xiangyang Xu<sup>3</sup>, <sup>1</sup>Oklahoma State Univ., Stillwater, OK, <sup>2</sup>Syngenta, Vernon, TX, <sup>3</sup>USDA, Agricultural Research Service, Stillwater, OK
- P4-14** Impact of the salvinia weevil released for biological control of giant salvinia at Caddo Lake, TX. **Allen Knutson**, a-knutson@tamu.edu<sup>1</sup>, and Lee Eisenberg<sup>2</sup>, <sup>1</sup>Texas A&M Univ., Dallas, TX, <sup>2</sup>Texas A&M AgriLife, Karnack, TX
- P4-15** Glandless cotton in New Mexico: beet armyworm (*Spodoptera exigua*) and bollworm (*Helicoverpa zea*) development, field damage and potential for biological control. **Drew Garnett**<sup>1</sup>, Jane Breen Pierce, japierce@nmsu.edu<sup>1</sup>, Patricia E Monk<sup>1</sup>, Robert Flynn<sup>1</sup> and John Idowu<sup>2</sup>, <sup>1</sup>New Mexico State Univ., Artesia, NM, <sup>2</sup>New Mexico State Univ., Las Cruces, NM
- P4-16** Density-dependent *Lygus hesperus* (Hemiptera: Miridae) injury to maturing bolls in Texas cotton. Megha N. Parajulee, Abdul Hakeem, **Richard Norman**, richard.norman@ag.tamu.edu and Stanley C. Carroll, Texas A&M AgriLife Research and Extension Center, Lubbock, TX
- P4-17** A solar-powered UV light trap for collecting insects. **Justin Scott**, justin.scott@ttu.edu, Samuel Discua, Joanne Robles, Scott Longing and James Cokendolpher, Texas Tech Univ., Lubbock, TX

# PROGRAM

## WEDNESDAY, 26 FEBRUARY 2014 (cont.)

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- P4-18** Preliminary analysis of habitat associations of the endemic darkling beetle, *Epitragosoma arenaria* (Coleoptera: Tenebrionidae). **Scott Longing**, scott.longing@ttu.edu, Samuel Discua and Justin Scott, Texas Tech Univ., Lubbock, TX
- P4-19** How yield of organic vineyard was affected by the leaf cutter ant defoliation and drought of 2012-2013? **Gabriela Esparza-Díaz**, gesparzadiaz@ag.tamu.edu<sup>1</sup> and Raul Villanueva<sup>2</sup>, <sup>1</sup>Texas A&M Univ., Weslaco, TX, <sup>2</sup>Texas A&M Agrilife Extension, Weslaco, TX
- P4-20** Fall chemical application to manage alfalfa weevil adults. **Alysha M. Soper**, alyshaso@ksu.edu, Jeff Whitworth and Holly Davis, Kansas State Univ., Manhattan, KS

5:00 PM - 7:00 PM **Linnaean Games (Finals)**  
Room: Trinidad

5:00 PM - 7:30 PM **Regular Poster Takedown**  
Room: Monte Cristo B

7:30 PM - 10:00 PM **Banquet/Final Business Meeting/Awards**  
Room: Romeo & Julieta Ballroom

# PROGRAM

**THURSDAY, 27 FEBRUARY 2014**

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- |                    |  |
|--------------------|--|
| 6:00 AM – 9:00 AM  | <b>Breakfast</b> (on your own)<br>Mangos Restaurant                          |
| 8:00 AM - 10:00 AM | <b>Southwestern Branch Executive<br/>Committee Meeting</b><br>Room: Trinidad |

## PRESIDENTS AND CHAIRMEN OF SWB-ESA

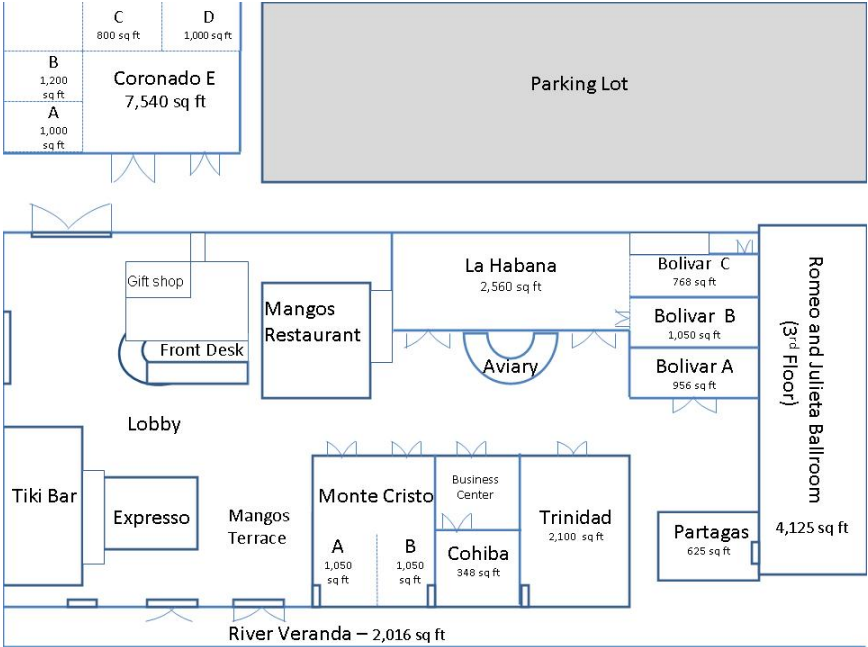
<b>President</b>	<b>Year</b>	<b>Location</b>
Pres. Jesus Esquivel	2013-14	San Antonio, TX
Pres. Scott Bundy	2012-13	Las Cruces, NM
Pres. Allen Knutson	2011-12	Little Rock, AR
Pres. Tom Royer	2010-11	Amarillo, TX
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Pres. Bart Drees	2005-06	Austin, TX
Pres. Phil Mulder	2004-05	Albuquerque, NM
Pres. John D. Burd	2003-04	Lubbock, TX
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Pres. John G. Thomas	1992-93	Albuquerque, NM
Pres. Don Bull	1991-92	Tulsa, OK
Pres. Aithel McMahon	1990-91	College Station, TX
Pres. Russel E. Wright	1989-90	San Antonio, TX
Pres. Joyce Devaney	1988-89	El Paso, TX
Pres. Russ Andress	1987-88	Dallas, TX
Pres. Don Rummel	1986-87	Austin, TX
Pres. John E. George	1985-86	Monterrey, Mexico
Pres. Paul D. Sterling	1984-85	San Antonio, TX
Pres. H. Grant Kinzer	1983-84	Oklahoma City, OK
Pres. James R. Coppedge	1982-83	Corpus Christi, TX
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Pres. Weldon H. Newton	1975-76	Oklahoma City, OK
Pres. Harry L. McMenemy	1974-75	El Paso, TX
Pres. Roger O. Drummond	1973-74	Dallas, TX
Pres. Dieter S. Enkerlin	1972-73	San Antonio, TX
Pres. Stanley Coppock	1971-72	Mexico City, Mexico

<b>Chairman</b>	<b>Year</b>	<b>Location</b>
Chm. C.A. King, Jr.	1970-71	El Paso, TX
Chm. Ted McGregor	1969-70	Brownsville, TX
Chm. Neal M. Randolph	1968-69	Dallas, TX
Chm. Walter McGregor	1967-68	Oklahoma City, OK
Chm. Harvey L. Chada	1966-67	San Antonio, TX
Chm. R.L. Hanna	1965-66	El Paso, TX
Chm. H.E. Meadows	1964-65	Austin, TX
Chm. Dial E. Martin	1963-64	Monterrey, Mexico
Chm. Manning A. Price	1962-63	Houston, TX
Chm. Sherman W. Clark	1961-62	Oklahoma City, OK
Chm. O.H. Graham	1960-61	San Antonio, TX
Chm. Clyde A. Bower	1959-60	El Paso, TX
Chm. Paul Gregg	1958-59	Dallas, TX
Chm. C.R. Parencia	1957-58	Houston, TX
Chm. J.C. Gaines	1956-57	San Antonio, TX
Chm. D.C. Earley	1955-56	Ft. Worth, TX
Chm. John M. Landrum	1954-55	Houston, TX
Chm. D.E. Howell	1953-54	Dallas, TX
Chm. P.J. Reno	1952-53	Galveston, TX
Chm. R.C. Bushland	1951-52	San Antonio, TX
Chm. H.G. Johnston*	1950-51	Dallas, TX

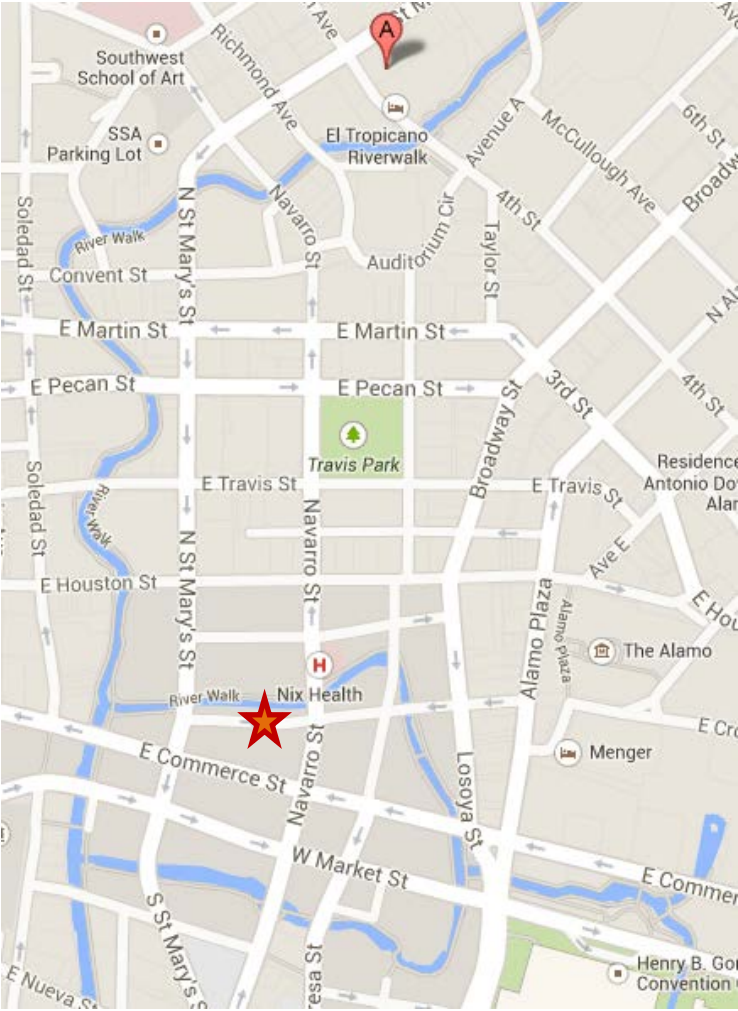
\* Southwestern Branch, American Association of Economic Entomologists

**Figure 1. Map of meeting rooms and facilities at El Tropicano Riverwalk Hotel, San Antonio, TX.**





**Figure 2: Map showing meeting location at El Tropicano Riverwalk Hotel and some local San Antonio attractions. The traditional Riverwalk area (★) can be reached by trolley, river taxi, or walking south along the Riverwalk Trail (Lexington Ave. entrance is located across the street from hotel) or street level south on Navarro St.**



## **NEARBY RIVERWALK ATTRACTIONS**

Located on Museum Reach at the original Hugman Dam, El Tropicano Riverwalk Hotel is situated at the beginning of this serene 1.3-mile stretch of the Riverwalk. Museum Reach meanders north and ends at the renovated Pearl Brewery area featuring outstanding local restaurants and shops.

Along Museum Reach you will encounter a lock and dam system, the San Antonio Museum of Art, river taxis, a bike and jogging trail, art installations including Bruce Lipski's F.I.S.H., and natural preservation areas of native wetlands.

Take a trolley, river taxi, or walk to the south and encounter the traditional Riverwalk area (1.2 miles via the the Riverwalk trail and .7 miles via street level). Enjoy the many restaurants and shops in this area and, of course, the famed Alamo. Grab a trolley and visit Market Square or explore the King William Historical District as well. We are certain you will find plenty of places to visit, shop, or dine within a short distance from the meeting site.

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